REMARKS

Claims 1-3, 6-11, 13, and 15-21 are currently pending.

Telephone Interview Summary

A telephone interview was conducted between Examiner Khawar Iqbal and Applicant's Representative Walter Malinowski on February 9, 2011. A telephone interview agenda had been sent to the Examiner on February 2, 2011. At the start of the interview, the Applicant's Representative asked the Examiner if he had read the telephone interview agenda and noted that the Examiner had previously found deficiencies in Josse. During the interview, Applicant's Representative several times asked the Examiner to identify in Josse where "the home location register maintaining **a subscriber-specific access parameter which indicates, independently of the address information,** whether the mobile subscriber has access rights to the first network and/or the second network of the different type." **The Examiner's response was to point to the following sections of Josse: column 5, lines 21-30; column 6, lines 49-61; column 7, lines 22-32; and column 8, lines 6-23 and (for HLR dealing with Attach message) 61-65.** The Examiner indicated that the GPRS Attach only, IMSI Attach only, and combined GPRS and IMSI Attach parameters, with the cited sections of Josse, met the claim language of "the home location register maintaining a subscriber-specific access parameter which indicates, independently of the address information." For the Examiner, "Attach" = "subscriber-specific access parameter." Applicant's Representative asked where in the Tables the subscriber-specific access parameter is shown. The Examiner, in response, pointed to the Tables 1-3 and without indicating any limitation to the fields in the tables noted that IMSI, SGSN SS7 Address, SGSN IP Address qualify as subscriber-specific access parameters. Applicant's Representative noted the passage "Because both cited passages of Josse relate to a single network only, i.e., a packet-switched network" there is no disclosure pertinent to the claim element of *restricting the location updating of the mobile station only to the first network or to the second network of the different type.* " The Examiner indicated that Josse discloses two types of networks: GSM and GPRS. The Examiner

invited amendment of the claims, but declined to offer any guidance on how the claims should be amended.

Remarks

Applicant wishes to make the following four points regarding the claim rejections found in the November 23, 2010 Office Action.

1)   Of the identified passages of Josse, only the one in column 5, lines 21-30, relates to the HLR (the others relate to the SGSN), but does not teach or suggest *"the HLR maintaining a subscriber-specific access parameter which indicates, independently of the address information"*.

2)   Claim 1 recites "in the home location register, maintaining the mobile subscriber data and receiving, from another network element, a message for requesting the mobile subscriber data, the mobile subscriber data comprising address information for accessing the mobile subscriber via the first and the second network of the different type" and "the home location register maintaining **a subscriber-specific access parameter which indicates, independently of the address information,** whether the mobile subscriber has access rights to the first network and/or the second network of the different type." "Maintaining" in the two first method steps must be constructed according to established conventions in the art. A **temporary caching of the Attach request is not "maintaining".**

3)   Because **IMSI/GPRS/combined attach process** is triggered by the mobile station, e.g. based on mobile station capabilities (MS class), it **is not a subscriber-specific access parameter maintained by HLR** which indicates (independently of the address information) whether the mobile subscriber has access rights to the first network and/or the second network of different type.

4)   **The Patent Office <u>admitted</u> during earlier prosecution that Josse did not anticipate Applicant's exemplary embodiments of the claimed invention.**

Claim Rejections under 35 U.S.C. 102(e)

The Patent Office rejected claims 1-3, 6-9, 11, 13, and 15-21 under 35 U.S.C. 102(e) as being anticipated by Josse, U.S. Patent No. 6,104,929.

For a claim to be anticipated, each and every non-inherent claim limitation must generally be found in a single reference. (MPEP 2131)

Claim 1 recites as follows:

> *A method of registering a multimode mobile station in a telecommunications system, wherein the telecommunications system comprises a home location register for maintaining mobile subscriber data and supports a first network and a second network of a different type, the method comprising:*
>
> *in the home location register, maintaining the mobile subscriber data and receiving, from another network element, a message for requesting the mobile subscriber data, the mobile subscriber data comprising address information for accessing the mobile subscriber via the first and the second network of the different type;*
>
> ***the HLR maintaining a subscriber-specific access parameter which indicates, independently of the address information, whether the mobile subscriber has access rights to the first network and/or the second network of the different type;***
>
> *wherein the first network and second network are provided by a common operator; and*
>
> *in response to said message for requesting the mobile subscriber data, the home location register sends the mobile subscriber data and also said subscriber-specific access parameter;*
>
> *wherein the network element that requested the mobile subscriber data is operable to use said subscriber-specific access parameter for restricting the location;*
>
> ***updating of the mobile station only to the first network or to the second network of the different type.***

The other independent claims recite subject matter similar to that recited by claim 1.

In the 23 November 2010 Office Action, the Patent Office cited Josse against these claim elements. The Patent Office asserted on page 2 of the November 23, 2010 Office Action as follows:

> Regarding claim 1, Josse discloses " the home location register (HLR 26, fig. 1) maintaining a subscriber-specific access parameter (see table 1-3) which indicates, independently of the address information (IMSI and GPRS attached indicates independently of the address information, also see table 1-3) and, whether the mobile subscriber has access rights to the first network (GSM [circuit switching], fig. 1) and/or the second network (GPRS [packet switching], fig. 1) of the different type (col. 5, lines 20-30, col. 6, lines 49-61).

It is as though the Patent Office has not followed the course of this patent application's prosecution history by citing Josse again. At a much earlier stage in the prosecution the same examiner had already admitted that Josse does not teach the highlighted claim elements. For instance, the office action dated 12 September 2007, states (on pages 4-5) that "**Josse et al do not specifically teach** *a subscriber-specific access parameter* and *independently of the address information*.**"**

What is important here, is the phrase *independently of the of the address information*. The HLR also stores address information, such as a subscriber's IMSI (International Mobile Subscriber Identity, which is a fancy way of saying "telephone number"), but storing the address information for addressing the mobile station is conventional functionality of the HLR. The Patent Office had previously argued that the existence of the IMSI indicates that the subscriber is entitled to use the network. The distinguishing feature of the present invention, as now claimed, is that the ...

> *subscriber-specific access parameter* indicates, *independently of the of the address information* whether the mobile subscriber has access rights to the first network and/or the second network of the different type.

At that time, the examiner carried out a supplemental search and cited supplemental prior art. The Patent Office did not cite Josse in the subsequent Final Office Action of June 2, 2008. The Patent Office now cites Josse as an anticipatory reference, but in the prior stages of prosecution, the Patent Office admitted that Josse does not disclose Applicant's exemplary embodiments of the claimed invention. **Josse is not a "new grounds of rejection" but instead an old and irrelevant ground for rejection, for the reason that the Patent Office has himself admitted on 12 September 2007 that Josse fails to disclose specific features of the claimed**

invention.

The Patent Office refers to table 1-3 of Josse, but he fails to specify an exact parameter which allegedly corresponds to the Applicant's *subscriber-specific access parameter indicates, independently of the of the address information whether the mobile subscriber has access rights to the first network and/or the second network of the different type.*

The Applicant speculates that the examiner may refer to the "IMSI and GPRS attach". But no such subscriber-specific access parameter is stored in the HLR. **As understood by those skilled in the art, "IMSI and GPRS attach" is a procedure triggered by a mobile station, as opposed to a subscriber-specific access parameter stored in the HLR.** Please refer to Josse, col. 2 lines 33-37: *"One type of location updating is known as an 'attach'. An IMSI attach is used by the mobile station to notify the system that is in active mode again, provided that it is in the same location area as it was when it entered the inactive state".* Similarly, Josse explains "GPRS attach scenario" on col. 6 lines 49-61, and in figures 3 and 3A. It is clear that the attach procedures are triggered by the mobile station.

Yet further, refer to Josse, col. 65 lines 56-61: "In the attach function the MS provides its IMSI and an indication of which type of attach that is to be executed. The different types of attach are IMSI attach, GPRS attach and combined IMSI/GPRS attach".

Even if Josse describes three attach types (IMSI attach, GPRS attach and combined IMSI/GPRS attach), Josse fails to disclose Applicant's *subscriber-specific access parameter indicates, independently of the of the address information whether the mobile subscriber has access rights to the first network and/or the second network of the different type.* Consequently, the system disclosed by Josse cannot distinguish which mobile subscribers have access rights to the first network and/or the second network of the different type.

In the February 9, 2011 telephone interview summary, the Patent Office referred to passages in Josse, specifically:

column 5, lines 21-30;

column 6, lines 49-61;

column 7, lines 22-32; and

column 8, lines 6-23; and

for HLR dealing with Attach message: column 8, lines 61-65.

An error in the Patent Office's logic is that to the extent that the mobile station's attach procedure is restricted (to IMSI attach, GPRS attach or both), such restrictions are based on the mobile station's capabilities (as opposed to the subscriber's access rights, as per Applicant's exemplary embodiments of the claimed invention). See, for instance, the discussion relating to the mobile stations class capabilities on column 8 lines 6 - 10 of Josse.

The **claim element** *"the HLR maintaining a subscriber-specific access parameter which indicates, independently of the address information ..."* **means maintaining this parameter, more or less permanently, or at least until such time that the parameter is updated.** "Maintaining a subscriber-specific access parameter" is not the same as or similar to the network handling the Attach procedure and detecting Attach Request in Josse. Based on the Attach Request, in Josse, the network element generates a temporary parameter for indicating whether an IMSI attach, a GPRS attach, or a combined attach should be performed. **A temporary caching of the Attach request is not "maintaining".** Thus, Josse does not teach *"the HLR maintaining a subscriber-specific access parameter which indicates, independently of the address information ... "*

The IMSI/GPRS/combined attach process is triggered by the mobile station, e.g. based on mobile station capabilities (MS class). Thus it is not subscriber-specific access parameter maintained by HLR which indicates (independently of the address information) whether the mobile subscriber has access rights to the first network and/or the second network of different type.

It is noted that in the interview summary mailed January 26, 2005, the Patent Office asserted "Applicant's proposed amendment including **defining that subscriber-specific access parameter indicates, "independently of the address information"**, whether the mobile

subscriber is entitled to use various networks **appears to overcome the prior art rejection of claim 8**." All three independent claims 1, 2, and 8 recited this additional subject matter that the Patent Office agreed overcame the rejection in the November 3, 2004 Office Action. Furthermore, the November 3, 2004 Office Action, on page 4, lines 7-8, the Patent Office asserted "Josse et al does not specifically teach a subscriber-specific access parameter."

In the May 6, 2005 Office Action, the Patent Office asserted on page 5 "Josse et al does not specifically teach a subscriber-specific access parameter and independently of address information." After the May 6, 2005 Office Action, the Patent Office appears to have dropped Josse as a reference applied to rejected Applicant's exemplary embodiments of the claimed invention until the current Office Action of November 23, 2010.

The Patent Office has not clearly identified which disclosed feature is interpreted to be "a subscriber-specific access parameter."

The Patent Office on page 3, lines 3-8, of the November 23, 2010 Office Action, asserted as follows:

> the home location register (HLR 26, fig. 1) maintaining a subscriber-specific access parameter (see table 1-3) which indicates, independently of the address information (IMSI and GPRS attach indicates independently of the address information, also see table 1-3) and, whether the mobile subscriber has access rights to the first network (GSM [circuit switching], fig. 1) and/or the second network (GPRS [packet switching], fig. 1) of the different type (col. 5, lines 20-30, col. 6, lines 49-61)

In Josse's disclosure from Table 1 from col. 15, line 41, though col. 16, line 20; Table 2 on col. 16, lines 23-32; and Table 3 from col. 16, line 35, through col. 17, line 31, it is not clear which field is considered by the Patent Office to be "a subscriber-specific access parameter."

It is not known if the Patent Office considered the "subscriber-specific access parameter" to be the Attach Type or MS Class described as included in the Attach Request message in col. 7, line 64, through col. 8, line 5, of Josse as follows:

> At step 3-1 of FIG. 3A, mobile station (MS) 40 makes its identity (e.g., its IMSI) known to the SGSN serving base station system 30_2, i.e., SGSN 24_2, by sending an Attach Request message. The Attach Request message of step 3-1 includes e.g., the following informational parameters relative to mobile station (MS) 40: IMSI, MS Class, Classmark, CKSN, Attach Type, and DRX Parameters. The Attach Request message is sent via base

station system 30_2 to SGSN 24_2.

Josse, in col. 8, lines 12-17 discloses as follows: "The "Attach Type" parameter indicates which type of attach is to be performed, i.e., GPRS Attach only, IMSI Attach only, or a combined GPRS and IMSI Attach. A combined GPRS and IMSI attach is used also in the case of a GPRS Attach when the MS is already IMSI-attached."

Applicant discloses an Attach Request 2-1 and an Attach Response 3-8 in Fig. 1 whereas message INSERT SUBSCRIBER DATA 3-6d which includes the "subscriber-specific access parameter PARAM" is sent to the new SGSN from the home location register. This stands in contrast to the "mobile station (MS) 40" making "its identity (e.g., its IMSI) known to the SGSN serving base station system 30_2, i.e., SGSN 24_2, by sending an Attach Request message."

Select passages from Josse are provided below.

Josse in col. 5, lines 20-30, col. 6, lines 49-61, discloses as follows:

> An example format of a prior art GPRS subscription data record stored in HLR 26_1 is shown in Table 1. The first field of a record in HLR 26_1 identifies the particular mobile station to which the record belongs, the first record containing the International Mobile Subscriber Identity (IMSI) of the mobile station, which is unique for each mobile station. For each packet data protocol type which the mobile station (MS) 40 is eligible to utilize (depending e.g., on its subscription agreement), the record in HLR 26_1 also contains a "context".
>
> Prior to discussing Attach procedure details, it is preliminarily mentioned that a GPRS-attached mobile station can use its IMSI to attach to the SGSN. This invention particularly concerns mobile stations with GPRS capabilities; a mobile station that is not GPRS-attached makes an IMSI attach, as described (for example) in the Global Systems for Mobile communication (i.e., GSM). An IMSI-attached class-A mobile station engaged in a circuit switched (CS) connection does not indicate that it is IMSI-attached when it performs a GPRS attach. In the attach function, the MS provides its IMSI and an indication of which type of attach that is to be executed. The different types of attach are IMSI attach, GPRS attach, and combined IMSI/GPRS attach.

Josse, in col. 10, lines 22-39, discloses as follows:

> FIG. 3 shows generally by step 3-8 certain Location Update procedures which are described in more detail in FIG. 3A with reference to steps 3-8a

through 3-8g. **If the Attach Request of mobile station (MS) 40 at step 3-1 is for an IMSI attach, then the new SGSN 24$_2$ forwards the IMSI attach to the VLR of the new MSC 28$_2$.** The address of VLR 29$_2$ is derived from the RA information. In this regard, if mobile station (MS) 40 is already IMSI-attached and is doing a GPRS attach, an association is created by sending (at step 3-8) a Location Updating Request message to VLR 29$_2$. This marks mobile station (MS) 40 as GPRS-attached in VLR 29$_2$. The Location Updating Request message sent to VLR 29$_2$ includes the new LAI, IMSI, SGSN Address, GPRS Attach State, MS Class. The GPRS Attach State included in the Location Updating Request message indicates that the mobile station is attached to GPRS, so that VLR 29$_2$ creates an association with the new SGSN 24$_2$ by storing SGSN Address and MS Class.

The passage from column 10 of Josse clearly illustrates that the attach message does not involve the HLR. This is different from Applicant's exemplary embodiments of the claimed invention.

Josse also fails to teach or suggest "wherein the first network and second network are provided by a common operator."

The Patent Office's attention is directed to the entirety of pages 5-6 of the November 2, 2005 response. As to Amin, Applicant asserted in pertinent part as follows:

> The Office Action alleged that Amin discloses a subscriber-specific access parameter which indicates, independently of the address information, whether the mobile subscriber is entitiled to use the first network, the second network or both networks (col. 6 line 33 – col. 7 line 17). However, in actuality, Amin merely discloses a subscriber's profile, which indicates whether roaming privileges are restricted for the MIN/ESN pair.
>
> Thus, the combined teachings of Josse and Amin would merely provide a hypothetical combination wherein any subscriber profile (which allegedly corresponds to the Applicant's subscriber-specific access parameter) indicates whether the subscriber's roaming privileges are restricted. However, it is well known to those skilled in the art that the term "roaming" refers to the attachment to a network provided by an operator which is not the subscriber's home network operator.
>
> Therefore, the hypothetical combination of **Josse** and Amin **fails to disclose, teach or suggest** the claimed inventive concept ... wherein **the first network and second network are provided by a common operator,** or any motivation for implementing such a configuration.

Claims 1, 2, 8, 15, and 18-20 recite, similarly or identically, as follows: "the home location register maintaining **a subscriber-specific access parameter which indicates, independently of the address information,** whether the mobile subscriber has access rights to the first network and/or the second network of the different type." In Applicant's original disclosure, in International Published Patent Application No. WO 99/39534, it is disclosed on page 7, lines 13-15, "a subscriber-specific access parameter, which indicates what rights the subscriber in question has in both networks" and on page 9, lines 18-21, "subscriber-specific access parameter PARAM, which indicates whether the subscriber has access to the GSM network, the GPRS network or to both networks."

Yet further, the Patent Office alleges that Josse also discloses the claim element:

wherein the network element that requested the mobile subscriber data is operable to use said subscriber-specific access parameter for <u>restricting the</u>
<u>*to*</u>
    <u>*updating of the mobile station only to the first network or to the second*</u> *network of the <u>different type</u>.*

The Patent Office refers to Josse on col. 9 lines 11-20 and col. 13 lines 6-35. But these passages describe a perfectly conventional location updating, wherein the subscriber data is transferred from an old SGSN to a new SGSN. But the cited passages of Josse, namely col. 9 lines 11-20 and col. 13 lines 6-35, are silent regarding *<u>restricting the location updating of the</u>* <u>*mobile station only to the first network or to the second network of the different type*</u>. As to the first cited passage (col. 9 lines 11-20), this passage relates to packet-switched networks only, as stated in Josse on col. 8 lines 45-52:

> *FIG. 3A shows various aspects of the authentication, security, and equipment checking operations generally depicted as steps 3-2 and 3-2a in FIG. 3. <u>These</u> <u>authentication functions are conventional,</u> such as those which are defined in the subclause "Security Functions" in the document Digital Cellular Tele-communications System (Phase 2+), General <u>Packet</u> Radio Service (GPRS) Service Description ...*

The second cited passage (col. 13 lines 6-35) is similarly silent regarding *<u>restricting the</u>*

_location updating of the mobile station only to the first network or to the second network of the
different type._ This passage is similarly related to packet-switched networks only, as stated in
Josse on col. 8 lines 56-61:

> _As in FIG. 4, step 4-3 of FIG. 4A depicts execution of conventional security
> functions. These security procedures are defined in subclause "Security Function"
> of the document Digital Cellular Telecommunications System (Phase 2+),
> General Packet Radio Service (GPRS) Service Description ..._

Because both cited passages of Josse relate to a single network only, i.e., a packet-
switched network" there is no disclosure pertinent to the claim element of _restricting the
location updating of the mobile station only to the first network or to the second network of the
different type._

Thus, for the above reasons, the currently pending claims are not anticipated by Josse.

Applicant also respectfully submits that the rejection of claims 1-3, 6-9, 11, 13, and 15-21
under 35 U.S.C. 102(e) as being anticipated by Josse has been overcome. The Patent Office is
respectfully requested to reconsider and withdraw the rejections of claims and to allow all of the
pending claims as now presented for examination. For all of the foregoing reasons, it is
respectfully submitted that claims 1-3, 6-9, 11, 13, and 15-21 are allowable. Should any
unresolved issue remain, the Patent Office is invited to call the attorney of record below.

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Respectfully submitted:

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